The Pore Size of 3D-Printed PCL/PEG/Hydroxyapatite Scaffolds Affects Bone Regeneration by Modulating Macrophage Polarization and the Foreign Body Response

Wenfeng Li^{a1}, Fang Dai^{a,b}, Shan Zhang^e, Fancheng Xu^a, Zhiyong Xu^d, Shousheng Liao^c, Liangtao Zeng^c, Li Song^{a,b*}, Fanrong Ai^{e,f*}

- a. The Department of Stomatology, the Second Affiliated Hospital of Nanchang University, Nanchang, China
- b. The Institute of Periodontal Disease, Nanchang University, Nanchang, China
- c. The Department of Pathology, the Second Affiliated Hospital of Nanchang University, Nanchang, China
- d. School of Pharmacy, Nanchang University, Nanchang, China
- e. School of Mechatronics Engineering, Nanchang University, Nanchang, China
- f. Nanchang Municipal Key Laboratory of 3D Bioprinting Technology and Equipment, Nanchang, China

Figures

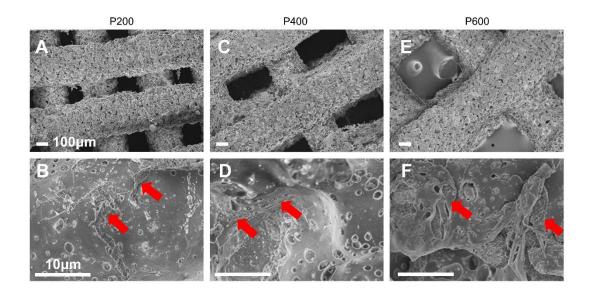


Figure S1 | SEM observations of RAW 264.7 cell behavior in contact with 3D-printed scaffolds with different pore sizes at 3 days. **(A-B)** P200 scaffold. **(C-D)** P400 scaffold. **(E-F)**

P600 scaffold. Red arrow-RAW 264.7 cell.

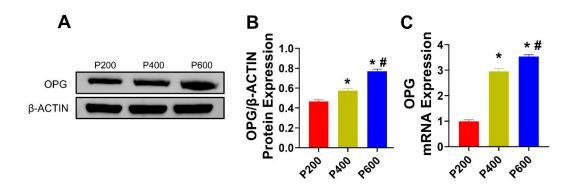


Figure S2 | Expression of OPG proteins (**A**) and quantified in column diagram (**B**) expression of OPG mRNA (**C**). * Different from P200 (P < 0.05) # Different from P400 (P < 0.05).

Table S1.The primers sequences used in qRT-PCR

Gene		Sequence (5'-3')
OPG	Forward	CCCTTGCCCTGACCACTCTTAT
	Reverse	AGGGTGCTTTCGATGAAGTCTCA
GAPDH	Forward	CCTCGTCCCGTAGACAAAATG
	Reverse	TGAGGTCAATGAAGGGGTCGT